

## Hydraulic Accumulators – Rules and Regulations

### Introduction

This document is a summary of OH&S requirements relating to hydraulic accumulators. Hydraulic accumulators are pressure vessels and as such require statutory regulation.

### 1. Design Registration

Hydraulic accumulators with Hazard Levels A, B, C and D (as specified in AS4343) shall have their design registered with NSW WorkCover.

Design registration is a process of having the design verified by 3<sup>rd</sup> party and then registering this design with NSW WorkCover. Acceptable pressure vessel design in NSW is AS1210. Overseas designs may be used only if they provide equivalent level of safety as AS1210.

Imported equipment shall be design registered.

Older equipment should also be design registered; however, this is not always practical and NSW WorkCover have released a position paper covering this topic.

### 2. Plant Registration

Hydraulic Accumulators with Hazard Levels A, B and C (as specified in AS4343) shall be registered as plant with NSW WorkCover. Person responsible for plant registration is the owner of the equipment.

Plant registration is a process of filling out the relevant form and paying registration fee (\$65).

Plant owners with multiple accumulators should enquire about "Multiple Registration Fee of Plant Items".

### 3. In-Service Inspection

As a risk control measure employer must ensure that pressure equipment is inspected in accordance with AS3788-2001.

Each owner is responsible for ensuring that the extent and frequency of inspection is appropriate and adequate for the continued safe and economic operation of the pressure equipment. This may require seeking of expert outside advice.

All Pressure vessel inspections shall be carried out by a competent person, such as a Boiler inspector or Company that specializes in Pressure vessel inspections.

#### Nominal Inspection Periods (AS3788)

|  | Commissioning | 1st Year | External | Nominal | Extended |
|--|---------------|----------|----------|---------|----------|
| P = design pressure<br>V = vessel volume |               |          |          |         |          |
| Oil Service                              |               |          |          |         |          |
| PV < 100 MPa·L                           | N             | N        | -        | -       | -        |
| PV = 100-200 MPa·L                       | Y             | N        | -        | -       | -        |
| PV > 200 MPa·L                           | Y             | Y        | 2        | 12      | 12       |
| Chemical Service                         | Y             | Y        | 2        | 4       | 12       |

Relating above table to Olaer standard oil service units rated to 345Bar

- 1 & 2.5ltr units are not subject to inspections
- 4ltr units are subject to commissioning inspection.
- 10ltr and above are subject to internal and external inspection.

All accumulators used with chemicals that are corrosive or flammable are to be inspected on regular basis. The inspector can grant an extended period for internal inspections if he feels that there is no ground for expecting any corrosion problem after he has done the first internal inspection.

### References

AS4343, AS3788, NSW OH&S Regulation 2001

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